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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BERNSHTEYN, MICHAEL

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,227

Applicant(s)

GROTH ET AL.

Examiner

Michael Bernshsteyn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 11-30 is/are pending in the application.
- 4a) Of the above claim(s) 11-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-5 and 11-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/10/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-5, drawn to a polymeric composition;

Group II, claim(s) 11-30, drawn to material for use in medical or biological applications, membrane, film or coating and a method for producing a membrane.

2. The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I claims is the claimed a polymeric composition and this feature is not present in Group II. The special technical feature of the Group II claims is the claimed material for use in medical or biological applications, membrane, film or coating and a method for producing a membrane and this feature is not present in Group I. Therefore unity of invention is lacking.

3. During a telephone conversation with Mr. Bruce S. Londa (Registration No. 33,531) on January 17, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-5. Affirmation of this election must be made by applicant in replying to this office action. Claims 10-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

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or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Claims 1-5 are active in the Application.

Claim Objections

6. Claims 2 and 5 are objected to because of the following informalities. The recitation "particularly" is objected because it is unclear whether the limitations following the phrase are part of the claimed invention. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

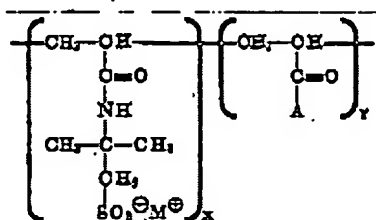
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Persinski et al. (U.S. Patent 3,768,565).

Persinski discloses polymers containing 2-acrylamido-2-methylpropane sulfonic acid (abstract). The polymers are random, linear, high molecular weight water-soluble polymers containing **at least 2.5 mole percent of 2-acrylamido-2-methyl-propane sulfonic acid**. The polymers are represented by the structural formula:

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where "M⁺" is hydrogen, ammonium, or alkali metal, preferably sodium or potassium; "A" is -NH₂ and/or -O⁻ M⁺ such that -NH₂ is from 50 to 100 percent of the "A" groups; "X" is from about 2.5 mole percent to 100 mole percent and "Y" is from 0 to about 97.5 mole percent.

The polymers of the reference may be prepared by copolymerizing 2-acrylamido-2-methylpropane sulfonic acid or its water-soluble salt and acrylamide in the desired molar proportions (col. 3, lines 24-48).

Persinski discloses the way to prepare polymers containing carboxyl groups by copolymerizing 2-acrylamido-2-methylpropane sulfonic acid or its water-soluble salt with acrylamide and acrylic acid (or methacrylic acid which is considered equivalent to acrylic acid) or its water-soluble salt. The polymerization may be carried out by using any of the well known free radical solution, suspension, or emulsion techniques. It is preferable to use solution polymerization but have made suitable polymers using both emulsion and suspension techniques. However, any other suitable means may be employed for preparing the polymer as is recognized by one skilled in the art (col. 3, line 54-67).

Examples of some of the useful **water-soluble comonomers** are methacrylamide, methacrylic acid, the N lower alkyl substituted acrylamides and methacrylamides, diacetone acrylamide, alkali metal styrene sulfonates, and di lower alkyl diallyl ammonium chlorides. Examples of some of the **water-insoluble**

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comonomers are vinyl acetate, **acrylonitrile**, vinyl chloride, lower alkyl esters of acrylic and methacrylic acids and styrene (col. 4, lines 9-17).

Therefore, the subject matter of the instant claim 1 and dependable claims 2-5 are expressly met by Persinski.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Neff et al. (U.S. Patent 6,130,303).

Neff discloses water-soluble, high molecular weight, polymeric, microparticles with a high degree of branching and a microemulsion polymerization process for preparing the microparticles. The microparticles give excellent results in a number of solid-liquid separation processes (abstract).

Neff discloses an emulsion composition containing **water-soluble** high, molecular weight, branched cationic, anionic and non-ionic polymers and processes for preparing the same (col. 3, lines 15-17).

Anionic monomers are selected from anionic ethylenically unsaturated compounds. Generally, they comprise **water-soluble** carboxylic or sulfonic acids such as (meth)acrylic acid; styrene sulfonic acid; itaconic acid, etc. (col. 4, lines 1-9).

Non-ionic monomers generally comprise acrylamide; methacrylamide; N-alkylacrylamides such as N-methyl acrylamide; N,N-dialkylacrylamides such as N,N-dimethylacrylamide; methyl acrylate; methyl methacrylate, etc. (col. 4, lines 9-15).

These ethylenically unsaturated monomers may be polymerized to produce cationic, anionic and non-ionic homopolymers, copolymers, terpolymers and the like. The monomers are combinable in all proportions. Preferably, a non-ionic monomer,

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such as acrylamide, is copolymerized with a cationic monomer to produce a cationic copolymer. Copolymers comprise **from about 1 to about 99 parts, by weight, of non-ionic monomer and from about 99 to about 1 part by weight of anionic or cationic monomer or mixtures thereof** (col. 4, lines 16-26).

Thus, all the limitations of the instant claim 1 are met by Neff.

Conclusion

Other references are considered pertinent to the Applicant disclosure but not cited in this office action include U.S. Patents 4,563,290, 4,749,498, 6,417,268, 6,743,288 and US Patent Application Publication 2002/0053413 are shown on the Notice of References Cited Form (PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn
Patent Examiner
Art Unit 1713

MB
01/18/2006


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